## ABSTRACT OF THE DISCLOSURE

A method of free radical polymerization and for cleaving a thio group from the resulting polymer is provided. The method comprises forming a mixture of one or more monomers, at least one free radical source and a chain transfer agent, wherein the chain transfer agent comprises a thio moiety. The mixture is polymerized, and the resulting polymer is mixed with a free radical source, and a monomer having little or no homopolymerizability under cleavage conditions. The thio moiety on the polymer is replaced with a group of interest.